

# News of the Society

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## *Presidential Address*

### Human Ecology and Psychosomatic Medicine

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I SHOULD LIKE to express to the members of this society my extreme gratitude for their having elected me to the office of President. It is an honor that has given me great satisfaction—the more so because I am not a psychiatrist, and my career has deviated markedly from that rapid and steady progression from Research Fellow to Department Head which is the present day hallmark of success in Academia. Like a number of others in this society, I have devoted the productive years of my life to the difficult task of trying to orient medicine toward the complexities of human biology, as well as toward the complexities of cellular pathology, and my efforts in this direction have not always excited the unrestrained enthusiasm of my colleagues.

It is with some dismay that I have realized that this year is the 25th anniversary of my graduation from Harvard Medical School. Mine was the last class at Harvard to be taught by Walter Bradford Cannon. There is not any doubt in my mind that his course in physiology determined the direction of my medical thinking from that time forward. Nor is there any doubt that, of my clinical

teachers, Dr. Stanley Cobb and Dr. Soma Weiss had the greatest influence upon my subsequent career in medicine.

I was one of those young physicians who returned from the war with a desire to add another scientific dimension to the teaching of clinical medicine. When I began my work at Cornell with Dr. Harold Wolff it appeared to me, as it did to many others, that the physician who plans to advise and guide his patient over the years must have an understanding of human behavior and of how men interact with the biological organizations of which they are themselves a part. It seemed to me especially important for the physician to know how the interaction of a man with the people around him, and with his society, might affect his health. This was no solitary vision on my part. It was a vision widely shared by the older members of this society, and by many others in academic medicine. In the late 1940's many people sought to bring this vision to reality, and almost all agreed that it represented a desirable end. Over the years, those of us who set ourselves to this task have taken a number of steps toward our goal. Yet, I think that most of us would agree that we have not come nearly so close to attaining it as we confidently believe that we would 20 years ago.

I think that a primary reason for our

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Presidential Address, delivered at the Annual Meeting of the American Psychosomatic Society, New Orleans, La., Apr. 8, 1967.

Received for publication Apr. 19, 1967.

slow progress has lain in the fact that we underestimated the magnitude of the intellectual challenge that we faced. So long as human biology dealt with no level of organization higher than that of the cell or the organ, it could live quite comfortably with the scientific assumption that there is a real and objective external world which is capable of being perceived similarly by all men, and is subject to measurements and counts that can be independently verified. This assumption has been the basis for Western science since the days of the Renaissance; yet it was not by any means the earliest, or necessarily the most influential, view that man has had about the nature of the world. From the beginning of human thought some men have looked inward at their own ideas and sensations, and have been convinced that primary reality lies in the world of the mind. This point of view has been extensively explored by many able thinkers from the days of the earliest human civilizations. It became a particular concern of Western philosophers in the 17th and 18th centuries, when the evident practical success of the scientific method began to call into question all traditional ways of thinking. Despite the success of the scientific method, I do not believe that the fundamental logic of this ancient point of view has yet been successfully assailed.

The scientist, as we all know, largely ignored the philosophic conflict about his assumptions—indeed, I think he was for the most part unaware of it—until psychology began to develop in the middle of the 19th century. At this point the conflict became all too evident. I am sure that I do not have to remind the members of this society of how the concepts of those who dealt with the mind were first rejected with contempt as “subjective,” “vitalistic,” and “unscientific,” or how the work of Sigmund Freud, primarily, through its tremendous impact upon our culture, made it clear

that these concepts provide a description of reality that cannot be ignored by those scientists who deal with man. It was almost at the time that Freud's work first appeared that the physicists began to encounter the problems of indeterminacy in the subatomic world, and the astronomers found themselves forced to deal with concepts of relativity in the cosmos. All of this intellectual ferment had a very early impact on psychiatry, but it was spared to those of us in medicine until we began to deal with the problems of human behavior and interpersonal reactions in relation to illness. It has bedeviled us since that time. It is still such a live issue that I almost forbear to mention it before this society.

It is unfortunate that this intellectual ferment has taken the form of a conflict, with arguments about who is right and who is wrong. So far as I can read the data, there are at least two ways of viewing man in relation to the universe: one based on the scientific assumption of a real, measurable, external world, simultaneously perceived by many; and the other based on the primary reality of an internal world of thoughts and sensations, perhaps unique to the self. Both of these points of view have their value, and both have their limitations; both are internally consistent, and both seem to hold true over a certain range of human experience. I am not aware that one has been proven to have more ultimate validity than the other, or that the existence of one precludes the existence of the other. Quite the contrary. It appears to me that over quite a wide range of human experience there are two ways of describing phenomena, and that both are valid. Thus, I cannot conceive of a disease—or of any other phenomenon of human life—that could not be described in psychodynamic terms with validity; I equally well cannot conceive of any disease, or any other phenomenon of human life, that could not be described in terms of the properties of

order, organization, and probability that form the basis for sciences such as physics, chemistry, and biology. In short, I believe that one can take the position that all disease is "psychosomatic" or that none is, depending upon one's point of view; but it would be difficult to defend the position that some disease is "psychosomatic" and some not.

I mention all of this because of the difficulty it has caused for those of us who have attempted to deal with human illness in the context of human behavior and human society. Over the years, natural scientists trained in the "hard" disciplines have rushed upon the dynamic psychologist, outraged at this Philistine who would drag the dead carcasses of subjectivism and vitalism back into science. During the same period the dynamically oriented psychologist, intent upon exterminating mechanistic scientism and simple-minded behaviorism from human psychology, at one time threatened to exclude from psychiatry all of those who had not been anointed by psychoanalysis. Teachers and students, forced to deal with unfamiliar and apparently irreconcilable concepts, have tended to adopt one and to reject the other, polarizing their attitudes more vigorously than before. Above all, confusion has reigned throughout the field because of the difficulty that students, teachers, and investigators alike have experienced in trying to deal simultaneously with concepts drawn from logically disparate points of view.

I should like to assume a President's prerogative and call for peaceful co-existence, and for the tacit acknowledgment of the fact that, in the absence of proof to the contrary, there are at least two valid ways of viewing man's relation to the universe. I should also like to call for consistency, and urge that we work within one frame of reference or the other—or, if we must work with the two in parallel, that we identify which we are dealing with at any given time, and

be clear about this in our minds. Let us not confuse grapefruit with cobblestones just because they have the same size and general configuration. I would argue, as would many others, that one can measure microvolts or performance on psychological tests, and that one can count bits or alpha waves, but that we do not experience these things as such. I would argue that one can have a wish, feel an emotion, or will an act, but that one does not count or measure these things as such; for my microvolt is the same as your microvolt, if we accept the scientific assumption, but I can never know whether the pain or anger that I feel is the same as the pain or anger that you feel, even though my pain is valid for me and yours is for you.

Now, as the members of this group well know, it has been my choice to adopt the assumptions of the natural sciences, and to operate within their framework. I hold no brief for the peculiar validity of this approach. I find it congenial, and especially valuable because the assumptions, the concepts, and the methods are the same throughout the physical and the natural sciences, and throughout a large part of the social and the behavioral sciences as well. I have considered myself to be dealing with "ecological" phenomena, rather than "psychosomatic" phenomena, because I have been concerned with "man-environment" relationships rather than with "mind-body" relationships. But never mind; a very large proportion of the transactions between man and environment involve the sense organs and the brain, and as a result, nearly all of us within this Society are concerned with much the same phenomena, even though we deal with them from different frames of reference.

A brief recapitulation of my experiences with human ecology will provide me with a springboard for considering a second point relating to the topic with which I began this discourse: the mat-

ter of why we have not got further along toward our goal during the past 20 years. This second point has to do with the hampering effect of the pre-existing frames of reference of those involved in medicine, and with the hampering effect of the present organization of medicine. Physicians, as we all know, are oriented toward the delivery of medical care to individuals who are already sick, and who adopt the role of "patient." The profession and the clinical faculties of medical schools are organized into what are, in effect, "craft unions." The members of each speciality are highly skilled in the treatment or investigation of one facet of illness, and make no special claim to knowledge of other facets of illness, which they leave to members of other specialities. In a large medical center, men specialize not only in fine techniques such as neuroradiology and in subcategories of illness such as child psychiatry, but in single diseases such as diabetes mellitus.

I make no complaint about this. Such specialization on a large scale is essential to modern medicine. Medical knowledge is so complex that almost every diagnostic or therapeutic problem that we approach can be benefited by the knowledge of someone who has studied a field in depth—and often the problem requires such a person for its successful pursuit. Nor can I complain about the fact that physicians, almost to a man, prefer to deal with illness after it has become clearly manifest, rather than before. We have practically no knowledge of what to do to prevent a man from developing most of the illnesses that men develop, and even if we did possess this knowledge, neither the society nor the profession has a role for a physician who professes to understand this and to practice it.

The characteristics of the profession and of the medical school have had a strong tendency to force men into the present role structure, and there has

been a strong tendency on the part of the people in medicine to adopt one of the pre-existing roles that are open to them. Thus, after I had completed my medical training and entered on an effort to learn something about psychiatry, my colleagues assumed that I had decided, as they put it, "to become a psychiatrist." Thereafter, I found it increasingly difficult to have access to patients with what are regarded as "medical" conditions, except when they had "psychiatric complications" or "problems." When I continued my work with the metabolic adaptive patterns involved in diabetes mellitus, my colleagues assumed that I was headed for a super-speciality: the treatment of adolescent diabetics with "problems." In fact, an effort was made to enlist me in a diabetic clinic in that role. When I undertook the study of the distribution of illness in definable populations of "nonpatients" and associated myself with the Bell System for that purpose, despite reassurances to the contrary, my colleagues, on all sides, assumed that I had decided to desert Academia entirely, and to become an industrial physician. I can skip several intervening examples, and say that my role at the present time seems to be defined by many of my colleagues as that of a "cardiovascular epidemiologist." The opportunity to become a teacher of medicine who is responsible for the illnesses usually treated by a physician, who has a concern primarily with the people who become ill, who has a longitudinal and multifaceted view of illness, who has some understanding of the circumstances under which illness occurs, and who has some knowledge of how the interactions of men with the important people around them, and with their society, influence their health—this opportunity has not presented itself. I am afraid that it does not now exist, and I doubt that it will exist for some time to come.

However, the fact that we have not

attained some of the perhaps naive and unrealistic goals that we set for ourselves some 20 years ago is not the important point. The vast increase in our understanding during these years, and the slower but still impressive accumulation of factual information, is the important point. Previous Presidents have outlined for this Society the development of our understanding of mind-body relations, and how they relate to disease. This understanding has been paralleled by the explosive development of our knowledge of man-environment relationships, and how they relate to disease.

To my mind, the foremost intellectual development in this area since World War II has been the application of information theory to biology. This body of mathematical concepts related to order and organization has opened the door to our understanding of the *modus operandi* of the central nervous system—and, indeed, to the fundamental nature of many vital processes. For the first time we have begun to comprehend the neurophysiological bases for such phenomena as vision, cognition, and memory. Paralleling this there has been a vast increase in our understanding of the physiology of the higher centers of the nervous system, and of the neural mechanisms associated with such phenomena as sleep, hunger, and emotions. The major functions of many of the endocrines, and almost all of their connections with the central nervous system, have been uncovered during this time. The disturbances of the structure and function of end-organs, which occur as a part of adaptive reactions and which are the final link in the chain that leads

to disease, have also been uncovered during this time, slowly, by painstaking experimentation.

While all of this understanding of internal mechanisms has been advancing, we have vastly increased our knowledge of the evolutionary development of man, of the relation of man to culture, of the relation of cultural evolution to genetic evolution, and of the evolution of behavior and of society. We have learned more about the relation of men to social groups, and the mechanisms by which the demands of social roles influence the occurrence of disease. We have developed systematic ways of studying human behavior, and have applied these to the study of disease. More recently we have begun the systematic study of how social processes influence the occurrence of disease. The physician, who 25 years ago worked in a laboratory in the company of chemists, pathologists, and technicians, now finds himself involved with mathematicians and physicists on the one hand, and on the other hand with psychologists, sociologists, anthropologists, ethologists, and even city planners.

This, then, is my final point. While the members of this Society have been struggling with little success to free themselves from the time-honored concepts and rigid social structure of medicine, they have opened many doors to new ideas that will ultimately cause a revolution in medicine. The opening of these doors will turn out to have been the most important work of our lifetime. Of this I feel certain.

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# 25th Annual Meeting of the American Psychosomatic Society

*Boston, Mar. 29-31, 1968*

The Program Committee of the 25th Annual Meeting of the American Psychosomatic Society invites interested persons to attend and to submit abstracts of original work to be considered for presentation. Abstracts are limited to 500 words and are to be submitted in 12 copies, of which *two copies only* should indicate full identification of authors and their place of work. This procedure has been instituted in order that the selection of abstracts may be made as impartial as possible.

Abstracts of papers accepted will be printed and circulated to the members of the Society, as is customary, prior to the meeting, and will be available at a minimal price at the meeting.

Abstracts should be submitted by Nov. 15, 1967, to the Chairman, 265 Nassau Road, Roosevelt, N. Y. 11575.

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